

REMARKS

Claims 1, 5-14 and 16-25 are now pending in the present application. Claims 1 and 5-14 have been amended, claims 2-4 and 15 have been canceled and claims 16-25 have been added. Claim 1 is independent. Reconsideration of this application, as amended, is respectfully requested.

Reasons for Entry of an Amendments

It is respectfully requested that the present amendments be entered into the official file in view of the fact that the amendments to the claims automatically place the application into condition for allowance.

In alternative, if the Examiner does not believe that the application is in condition for allowance, it is requested that the Examiner enter the amendments for purposes of Appeal. The amendments to the claims simplify the issues on Appeal by addressing the Examiner's rejection under 35 U.S.C. § 112, second paragraph and by amending independent claim 1 to further define the present invention over the references relied on by the Examiner.

Rejection Under 35 U.S.C. § 112

Claims 1 and 4-15 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. This rejection is respectfully traversed.

At the outset, it is respectfully pointed out that claims 4 and 15 have been canceled without prejudice or disclaimer of the subject matter contained therein. Accordingly, rejection under 35 U.S.C. § 112, second paragraph has been rendered moot with regard to these claims.

With regard to claim 1, the Examiner asserts that the description relating to “lower” is ambiguous. As the Examiner will note, claim 1 has been amended to recite “wherein at least the tread block edges running into the tyre contact patch and extending at an angle to the central plane of the tyre are lowered over in an entire length thereof with respect to the central plateau of the respective tread block.” In view of this Amendment, it is believed that claim 1 is clear in that the entire length of the tread block edges running into the tyre contact patch are lowered.

With regard to claim 5, as the Examiner will note, this claim has been amended to include the parameters $y(t)$ and t as the exponential function and the tread block length, respectively. In addition, the term “adaptable” has been deleted and the recitation $t = 0$ has been corrected.

In view of the above amendments and remarks, Applicants respectfully submit that claims 1 and 5-14 are definite and clear. Accordingly, reconsideration and withdrawal of the Examiner’s rejection under 35 U.S.C. § 112, second paragraph are respectfully requested.

Rejections Under 35 U.S.C. §§ 102 and 103

Claims 1, 4, 6, 7 and 10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by EP 0 602 989. Claims 1, 4, 6-7 and 9-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Masaoka, USPN 5,690,761 in view of EP '989. Claims 8, 11, 14 and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Masaoka in view of EP '989 as applied above and further in view of Remick, USPN 5,127,455. Claims 12 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Masaoka in view of EP '989 as applied above and further in view of JP 3-32907, EP 0 367 557 or EP 0 591 125. These rejections are respectfully traversed.

At the outset, it is respectfully pointed out that claims 4 and 15 have been canceled without prejudice or disclaimer of the subject matter therein. Accordingly, the Examiner's rejections under 35 U.S.C. §§ 102 and 103 have been rendered moot with regard to these claims.

Amended independent claim 1 is directed to a vehicle tyre having a profile tread wherein a combination of elements are recited including a tread block boundary surface wherein "the contour of the tread block boundary surface extending from a start of the lowering up to the base of the groove extends in section planes parallel to the central plane of the tyre in the form of an extended S-curve, and wherein the curvature of the S-curve continuously changes in accordance with an exponential function $y(t)$ along an entire length

of the S-curve.” Applicants respectfully submit that the references relied on by the Examiner fail to teach or suggest the presently claimed invention.

As the Examiner will note, independent claim 1 has been amended to recite that “the curvature of the S-curve continuously changes in accordance with an exponential function along an entire length of the S-curve.” Applicants submit that this recitation is supported by the specification and drawings at least by FIGS. 1 or 2 (both mentioning “MODIFIED TREAD BLOCK (EXPONENTIAL FUNCTION)”) or by FIG. 3, as well as by the specification on page 4, last paragraph, and page 5, first paragraph. Applicants submit that this amendment to independent claim 1 clearly defines the present invention over the references relied on by the Examiner.

Referring to the EP '989 patent, Applicants submit that this patent fails to disclose the above aspect of the present invention. The EP '989 patent discloses a tread edge having chamfered corners with a straight wall portion therebetween. In view of this, there is no change in curvature along the entire length of the S-curve as recited in independent claim 1 of the present invention. In the presently claimed invention; however, the curvature of the S-curve continuously changes in accordance with an exponential function along an entire length of the S-curve. Referring to FIG. 4 of the EP '989 reference, for example, it becomes clear that the main portion 6 of the tread block edge is straight, while the portions 7 and 8 are curved. In addition, column 3, line 19 of the EP '989 reference indicates that

"the main portion 6 is straight and inclined at an angle." In view of this, Applicants submit that the EP '989 reference fails to anticipate independent claim 1 of the present invention.

With regard to the Masaoka reference relied on by the Examiner, this reference also discloses a tread block having edges with a straight portion and a curved edge between the groove bottom and the block wall. In view of this, this reference also fails to disclose an S-curve which continuously changes in accordance with an exponential function $y(t)$ along an entire length of the S-curve as recited in independent claim 1 of the present invention. Accordingly, this reference also fails to disclose the presently claimed invention.

With regard to dependent claims 6-14, Applicants respectfully submit that these claims are allowable due to their dependence upon allowable independent claim 1, as well as due to the additional recitations in these claims.

With regard to the remaining references relied on by the Examiner, since these references also fail to disclose an S-curve which continuously changes as recited in independent claim 1 of the present invention, these references also fail to make up for the deficiencies of the EP '989 and Masaoka references.

In view of the above amendments and remarks, Applicants respectfully submit that claims 1 and 6-14 clearly define the present invention over the references relied on by the Examiner. Accordingly, reconsideration and withdrawal of the Examiner's rejections under 35 U.S.C. § 102 and 103 are respectfully requested.

Allowable Subject Matter

The Examiner has indicated that claim 5 would be allowable if rewritten to overcome the rejection under 35 U.S.C. § 112, second paragraph, and to include all the limitations of the base claim and any intervening claims. Applicants greatly appreciate the indication of allowable subject matter by the Examiner. However, claim 5 has not been rewritten in independent form at this time, since it is believed that independent claim 1 is directed to allowable subject matter.

Additional Claims

Additional claims 16-25 have been added for the Examiner's consideration. Applicants submit that additional claims 16-25 are allowable due to their dependence upon allowable independent claim 1, as well as due to the additional recitations in these claims.

Favorable consideration and allowance of additional claims 16-25 are respectfully requested.

CONCLUSION

All the stated grounds of rejection have been properly traversed and/or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently pending rejections and that they be withdrawn.


It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact Paul C. Lewis, Registration No. 43,368 at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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